



Colorado Department
of Public Health
and Environment



July 9, 1999

Mr Joe Legare
RFCA Coordinator
Department of Energy-RFFO
P O Box 928
Golden CO 80402-0928

RE Annual Update for the Historical Release Report (September 1998)

Dear Mr Legare

The Colorado Department of Public Health and Environment (CDPHE) and the Environmental Protection Agency (EPA) have reviewed the 1998 Annual Update for the Historical Release Report. CDPHE and EPA are providing the attached comments and are also responding to recommendations for No Action or No Further Action (NFA) by categorizing each PAC/IHSS into three groups: 1. Concur with NFA, 2. More information required, and 3. Do not concur with NFA. To adequately justify NFA, each recommendation should include the specific criteria from RFCA Appendix 6 (as also described in the RFCA Implementation Guidance Document) which allow NFA to be proposed. If the justification is based on specific measurements or risk evaluations, then those values, exposure scenarios, etc. should be extracted from the original data source and summarized in text or tables. The adequacy of QA/QC that was performed on analyses should also be mentioned. In some cases, providing maps showing sampling locations would make a review of the narratives more complete and efficient.

1. The agencies concur with the recommendation for NFA for the following PACs/IHSSs:

700-1117	NW-203	400-800
NE-1405	NW-1500	400-811
NE-1406	000-172	700-150 5
NW-174B	100-608	



ADMIN RECORD

SW-A-004156

2 The agencies require more information to be able to approve NFA for the following PACs/IHSSs

NW-170
500-169

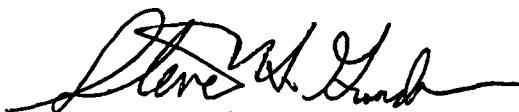
NE-1404

900-1318

3 The agencies do not concur with the recommendation for NFA for the following PAC/IHSS
NW-174A 900-140

If you have any questions concerning these comments, please contact Carl Spreng at 303-692-3358 or Gary Kleeman at 303-312-6246

Sincerely,



Steven H Gunderson
RFCA Project Coordinator
Colorado Department of Public
Health and Environment



Tim Rehder
Rocky Flats Project Manager
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cc: Norma Castañeda, DOE
Laura Brooks, K-H
Nick Demos, RMRS
Dan Miller, AGO
Steve Tarlton, CHPHE-RFOU
Susan Chaki, CDPHE

**Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
and
Environmental Protection Agency**

comments on

**Annual Update for the Historical Release Report
September 1998 (Rev. 0)
(RF/RMRS-98-269.UN)**

- 1 PAC 700-1117
The NFA criterion is that analytical results for all contaminants are below Tier II action levels

- 2 PAC NE-1404
Analytical data are described in the text as being from the excavated soil. The data sheet, however, indicates a water matrix. BTEX and TPH analyses should be performed on the remaining soil to confirm the assumption that no source remains

- 3 PAC NW-170 (IHSS 170)
A review of this narrative suffers from a lack of primary data available to the agencies. The referenced Data Summary Report (RMRS, 1997) is not in the CDPHE records and presumably was not submitted to the State or to EPA. The "internal investigation report" that was generated following the "unknown powder incident" in 1987 is also not available

While the soil-gas survey reported in Technical Memorandum 1 detected acetone, benzene, methane, tetrachloroethene, 1,1,1-trichloroethane, and trichloroethene, the analytical results for subsurface soil in Table 1 of this narrative reports analyses for only methylene chloride and naphthalene. The last sentence of the first paragraph on page 27 is unclear since the Tier I action level for naphthalene in subsurface soil is 1.01×10^4 mg/kg. It is expected that the detected amounts of trichlorotrifluoroethane are below hazardous levels. Slope factors for this compound are not available in sources used for PPRG calculations (IRIS, HEAST, etc.)

The NFA recommendation states that VOC concentrations in subsurface soil are below Tier I action levels. The 1997 Data Summary Report needs to be provided so that the subsurface soil concentrations can be checked against the new Tier II subsurface soil action levels. The NFA recommendation can also mention that the analytical results for surface soil reported in Technical Memorandum 1 are all below Tier II action levels for surface soil. Once the above-mentioned data has been provided for review, it is expected that this IHSS can be approved for no further action.

4 PAC NW-174A and NW-174B (IHSS 174)

The referenced Data Summary Report (RMRS, 1997) is not in the CDPHE records and presumably was not submitted to the State or EPA. The action levels mentioned in the discussion of the results of this report have been revised. The PCE concentration in Borehole 17497 exceeds the new Tier I subsurface soil action level of 3,150 µg/kg which triggers a removal action. The groundwater in this same borehole exceeds the Tier I PCE action level, so that the necessity of an action to protect surface water must be evaluated. The TCE subsurface soil concentration in Borehole 18997 exceeds the new Tier II action level of 32.8 µg/kg which likewise requires an evaluation of impacts to surface water.

Particularly since the Draft Summary Report is unavailable, the isotopic results for the surface soil analyses, as well as the background values against which they were measured, should be included in the narrative. In spite of "administrative controls to prevent radioactively contaminated material from being shipped to the yard," the "unknown powder incident" described in the IHSS 170 narrative occurred in 1987. External radiation monitoring did not prevent storage of radioactively-contaminated materials with at least moderate activity levels.

The exceedances of Tier I subsurface soil and groundwater action levels at IHSS 174A precludes a NFA recommendation. The agencies can consider the NFA recommendation for IHSS 174B once the 1997 Draft Summary Report is provided.

5 PAC NW-203 (IHSS 203)

The surface soil action levels for cobalt, copper, vanadium, Aroclor 1254, and Aroclor 1260 listed in Table 1 on page 38 have been modified slightly as part of the PPRG annual review process. The reported analytical results are still well below the revised action levels.

6 PAC 000-172 (IHSS 172)

The referenced OU 8 Data Summary (DOE, 1995) is not in the CDPHE records and presumably was not submitted to the State. In Table 1, the correct Tier II surface soil action level for benzo(a)pyrene is 0.784 mg/kg.

7 PAC 100-608

The criterion for NFA should be that no current or potential source in soils has been detected.

8 PAC 400-800

The cleanup levels in TSCA guidance are not established as NFA criteria. The criterion for NFA should be that the PCB concentrations are all below Tier II action levels.

9 PAC 400-811

The cleanup levels in TSCA guidance are not established as NFA criteria. The criterion for NFA should be that the PCB concentrations are all well below Tier I action levels. All PCB analyses, with the exception of Aroclor 1248, are below Tier II action levels as

well The highest Araclor 1248 concentration is barely above that action level so no action is required

10 PAC 500-169 (IHSS 169)

The agencies concur that it is reasonable to conclude that no current or potential threat exists due to the possible spill of hydrogen peroxide. However, information in this narrative alluding to a buried drum suggests that other drums, possibly with more hazardous constituents, may have been buried in the area. Before potential drum burial sites such as the chemical storage yard are considered for NFA, characterization activities should include attempts to locate buried drums. The referenced OU 13 documents indicate that no efforts to locate potentially buried drums were conducted or proposed.

11 PAC 900-140 (IHSS 140)

The list of metal COCs does not correspond with the list of metallic compounds and residues known to have been buried at this site. Possible conclusions are that boreholes were not suitably located or that the list of metals handled at the site is incomplete. Sampling in IHSS 140 appears to have occurred around the periphery rather than in the middle of the IHSS raising concerns that contamination may have been missed. Several of the isoconcentration maps in the OU 2 report appear to indicate a source in IHSS 140 for several contaminants seen in the Alluvial/Colluvial UHSU flow system.

The phrase, "in µg/Kg", should be deleted from the heading for Table 1 on page 86 since this differs from the units given in the table itself. This table should show that, according to the OU 2 RFI/RI Report, carbon tetrachloride, cis-1,3-dichloropropene, methylene chloride, tetrachloroethene, and trichloroethene exceed the new Tier II action levels for subsurface soil. The reported range of values for arsenic exceeds the Tier II action level for open space use. The collection of composite samples, rather than discrete samples, in the boreholes (over a 6-foot interval for all but the VOC analyses), which may have diluted the levels of contamination, is also a concern.

12 PAC 900-1318

The phrase "so that no current or potential source exists" should be added to the NFA recommendation. A summary of the analytical results (chemical and radiological) which confirmed the removal of contaminated soil must be included.